### (19) World Intellectual Property Organization International Bureau



## 

#### (43) International Publication Date 1 July 2004 (01.07.2004)

#### **PCT**

# (10) International Publication Number WO 2004/054732 A1

(51) International Patent Classification<sup>7</sup>:

B21C 47/30

(21) International Application Number:

PCT/SE2003/001960

(22) International Filing Date:

-16 December 2003 (16.12.2003)

(25) Filing Language:

Swedish

(26) Publication Language:

English

(30) Priority Data:

0203739-8

16 December 2002 (16.12.2002) SE

(71) Applicant (for all designated States except US): CA-MATEC INDUSTRITEKNIK AKTIEBOLAG [SE/SE]; P.O. Box 5134, S-652 28 KARLSTAD (SE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): CARLSSON, Allan [SE/SE]; Sunnevägen 6, S-665 94 FAGEREÅS (SE).

(74) Agents: KYLIN, Peter et al.; Hynell Patenttjänst AB, Patron Carls väg 2, S-683 40 HAGFORS/UDDEHOLM (SE).

(81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, EG, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, H, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PII, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

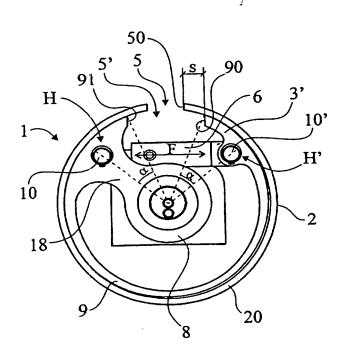
(84) Designated States (regional): ARIPO patent (BW, GII, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A REEL WITH A SUPPORT SURFACE ARRANGED ON A FLEXIBLE ELEMENT AND A METHOD OF REGULATING THE DIAMETER



(57) Abstract: A reel (1) for winding or unwinding reelable, strip-shaped objects such as steel strips, comprising a support surface (2) that extends in the main as a cylinder, a hub (8) arranged to rotate about an axis (4) in order to allow rotation of the support surface (2) about said axis (4), an adjusting device (60) arranged to cooperate with the support surface (2) in order thereby to vary the diameter (D1) of the support surface wherein the support surface (2) is arranged at a flexible element consisting of a continuous circumferential piece and that the adjusting device (60) is arranged to affect said support surface (2) to alter its shape, whereby the diameter (D) of the support surface can be varied.